Puget Sound Regional Council

TRANSIT ACCESS TOOLKIT

There are many ways to increase transit access, and doing so at specific places typically involves many different and disparate types of investments. The Transit Access Toolkit identifies 60 distinct transit access improvements within the following eight strategic areas:

- Align land use and transit policies and plans
- Enhance street network connectivity
- Improve the nonmotorized environment
- Increase transit service frequency, reliability, and coverage
- Elevate the transit user experience
- Improve access via local transit and drop-off modes
- Manage transit parking demand
- Increase transit parking supply

These strategic areas encompass a spectrum of approaches to increasing access to transit with some relevant in almost every case (e.g. Align land use and transit policies and plans) while others may not be considered at all in some places (e.g. Increase transit parking supply). Generally speaking, it may be straightforward which strategy or mix of strategies will be appropriate in a given context, but it may not always be clear what the best tools are to implement any particular strategy.

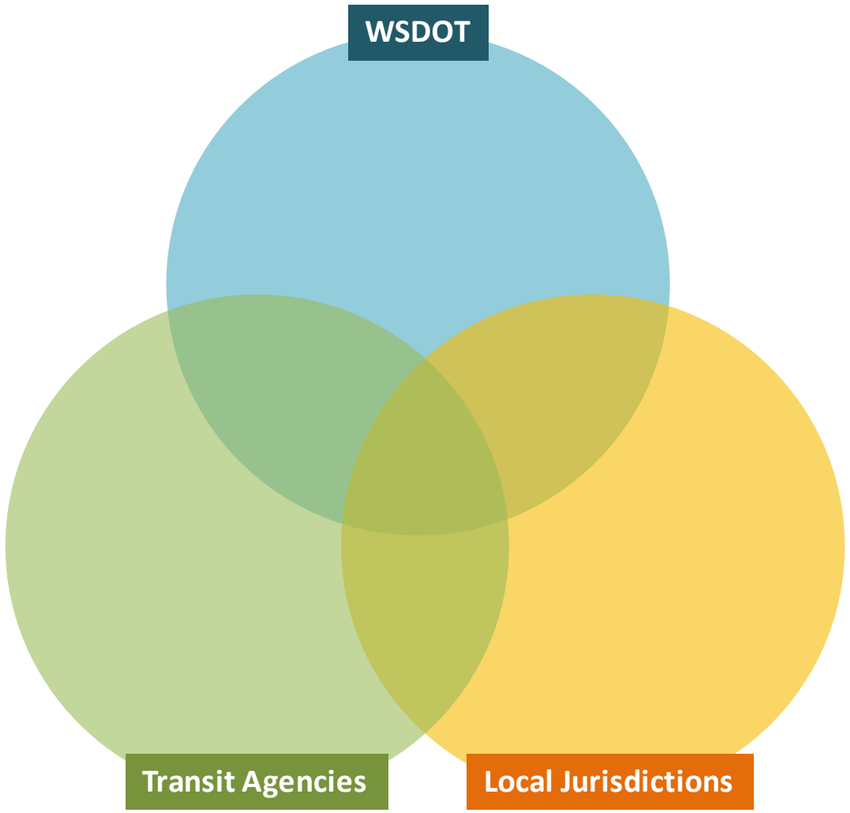
Within this organizing framework, the Transit Access Toolkit will:

- Help stakeholders understand the value of each strategy for increasing transit access;
- Identify the different roles played by local jurisdictions, transit agencies, and the Washington State Department of Transportation within each strategic area; and
- Document the benefits, costs, and common issues and challenges of each transit access improvement.

There is no silver bullet or one-size-fits-all approach to increasing transit access in a region as large as the central Puget Sound and with a diversity of place types ranging from the truly urban to the picturesquely rural. Increasing access depends on the particular context of a given location, and the interplay between a variety of characteristics, both existing and planned. Where the Transit Access Checklist can help stakeholders understand existing and anticipated transit access issues, needs, and opportunities in particular locations, the Transit Access Toolkit will help them understand the strategies to consider and the range of access improvements available to increase access.

In every case, multiple strategies will need to be pursued and implemented by a variety of actors, in the face of competing priorities, scarce resources, and other limitations. The Transit Access Toolkit is a resource for stakeholders to understand the range of possibilities available and to inform decision-making for increasing access to transit.

HOW TO READ THIS DOCUMENT



The Value of this Strategy

This section summarizes why a particular strategy is important and the value it provides in increasing access to transit. It describes some of the issues that exist for the implementation of the strategy throughout the region.

Furthermore, these strategies are likely to be applied in combination with others, such that street network improvements are accompanied by additions to the nonmotorized environment and changes to transit service frequency, reliability, and coverage. Whatever the case, delivering access improvements requires that agencies and jurisdictions work together to maximize their benefit.

The Value of Working Together

The Venn diagrams illustrate the interplay in roles regarding the implementation of specific investments that improve transit access. They also demonstrate the reality that delivering transit access improvements cannot successfully occur without close collaboration between these entities. In addition, the relative size and number of improvements identified within each portion of the Venn diagram indicates where local jurisdictions, transit agencies, and WSDOT play a more or less significant role in each strategic area.

Ultimately, the decision to deploy specific approaches to improving transit access should follow a mutually agreeable process between the relevant entities and with stakeholders beyond those depicted in these diagrams, particularly the residents, businesses, and others in any particular location.

Access Improvement	*Local Jurisdictions*	*Transit Agencies*	*WSDOT*
1. Access improvement example			
2. Access improvement example			
3. Access improvement example			
4. Access improvement example			

Legend

Adopt policy · Identify in planning documents · Advise, consult, and participate · Construct · Operate and maintain · Contribute funding

Roles and Responsibilities

This section summarizes in greater detail the improvements within a particular strategy that increase access to transit. The icons indicate at a high level the type of action undertaken by the relevant entity when it comes to implementing a particular access improvement. The actions include:

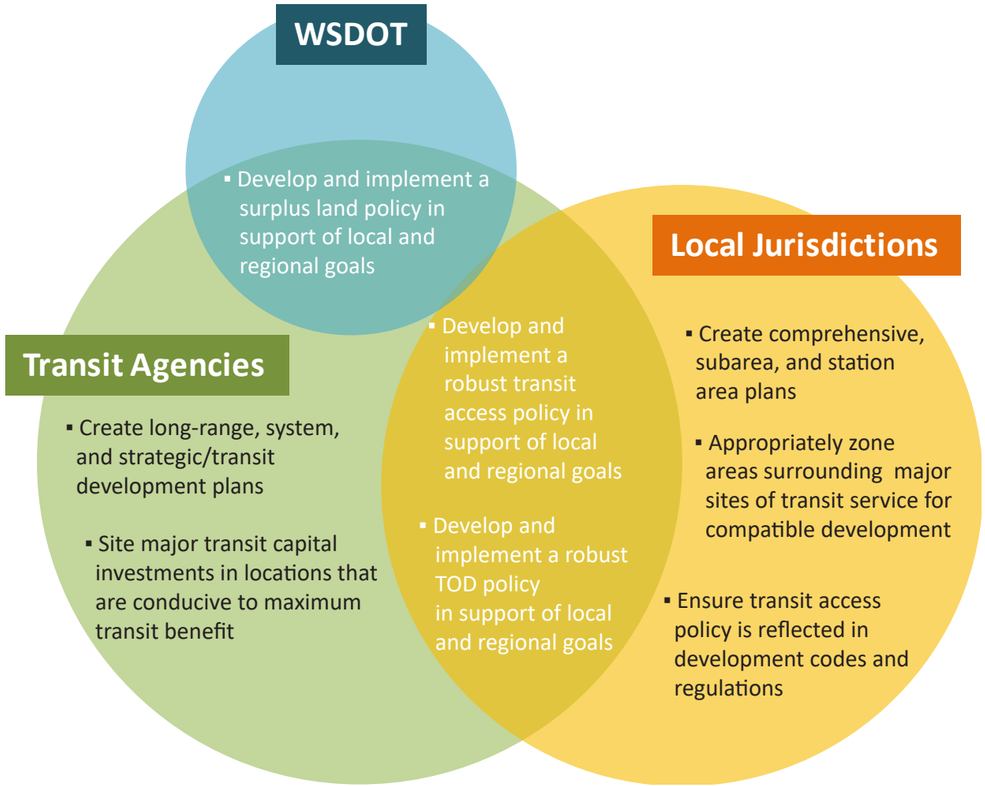
- Adopt policy
- Identify in planning documents
- Advise, consult, and participate
- Construct
- Operate and maintain
- Contribute funding

In some cases, actions may repeat across different entities. This simply reflects the reality that multiple entities may have overlapping functions for certain access improvements—this reality is depicted in the Venn diagram visualizations for each strategic area. For example, the provision of a queue jump that allows a transit vehicle priority through an intersection may be implemented by a local jurisdiction, transit agency, or WSDOT depending on the specific project, location, and context.

Finally, a brief write-up is provided in each strategic area for the typical roles and responsibilities for local jurisdictions, transit agencies, and WSDOT. When considering roles and responsibilities in a given context, it is important to remember 1) that there are likely to be stakeholders beyond these three entities involved in delivering transit access improvements and 2) that there will always be exceptions to rules.

After reviewing each strategic area at this level, a detailed spreadsheet follows that provides additional information about every access improvement listed. The spreadsheet identifies the benefits, roles, timing, costs and funding, common issues and challenges, and regional examples for all 60 transit access improvements included in the Transit Access Toolkit.

ALIGN LAND USE AND TRANSIT POLICIES AND PLANS



Access Improvement	*Local Jurisdictions*	*Transit Agencies*	*WSDOT*
1. Create comprehensive, subarea, and station area plans	Identify	Advise	Advise
2. Create long-range, system, and strategic/transit development plans	Advise	Identify	Advise
3. Site major transit capital investments in locations that are conducive to maximum transit benefit	Advise	Identify	Advise
4. Appropriately zone areas surrounding major sites of transit service for comptabile development	Identify	Advise	Advise
5. Develop and implement a robust transit access policy in support of local and regional goals	Adopt	Adopt	Advise
6. Ensure transit access policy is reflected in development codes and regulations	Identify	Advise	Advise
7. Develop and implement a robust transit-oriented development policy in support of local and regional goals	Adopt	Adopt	Advise
8. Develop and implement a surplus land policy in support of local and regional goals	Advise	Adopt	Contribute funding

Legend

Adopt policy · Identify in planning documents · Advise, consult, and participate · Construct · Operate and maintain · Contribute funding

The Value of this Strategy

Policies and plans are foundational elements and help establish a vision for the transit access priorities in a local jurisdiction and at a transit agency. Because these entities are central to the provision of good transit access, it is fundamental that relevant plans, policies, and priorities are well-understood by everyone.

To the extent to which plans at all levels—visionary, strategic, and functional—can be aligned, clearly articulate priorities, and establish expectations, then all parties involved can deliver benefits that result in improved transit access.

The Value of Working Together

Local jurisdictions and transit agencies have distinct planning documents that only they can adopt and implement. These entities also have distinct roles regarding the siting of and context for significant transit capital investments.

They can, however, both adopt policy that clearly articulates their vision and policy toward transit access and transit-oriented development. In addition, transit agencies and WSDOT may both adopt surplus land policies that support local and regional goals.

Roles and Responsibilities

Local Jurisdictions. The primary local jurisdiction planning and policy document affecting transit access is the comprehensive plan, most notably the transportation and land use elements. Local jurisdictions may also create subarea and station area plans, which can address access issues with more precision. It is also important that policy language be appropriately reflected in zoning codes and development regulations so the community's vision is translated to the built environment.

Transit Agencies. A transit agency's long-range plan plays a similar function to a local jurisdiction's comprehensive plan in establishing the vision and principles for the provision of transit service. Similarly, system plans, strategic plans, and transit development plans give a clearer sense of nearer-term projects and priorities. Finally, at least with respect to Sound Transit, the alternatives analysis and environmental review phases also establish expectations for alignments, station areas, and the scope of access-related improvements.

WSDOT. Apart from the Public Transportation Plan, the key planning documents at the state level are associated with the environmental planning process conducted at a specific project or corridor level. Because most of these are large highway projects, the impact to transit access can be marginal. That said, WSDOT can play a key participatory role in local and transit agency planning processes.

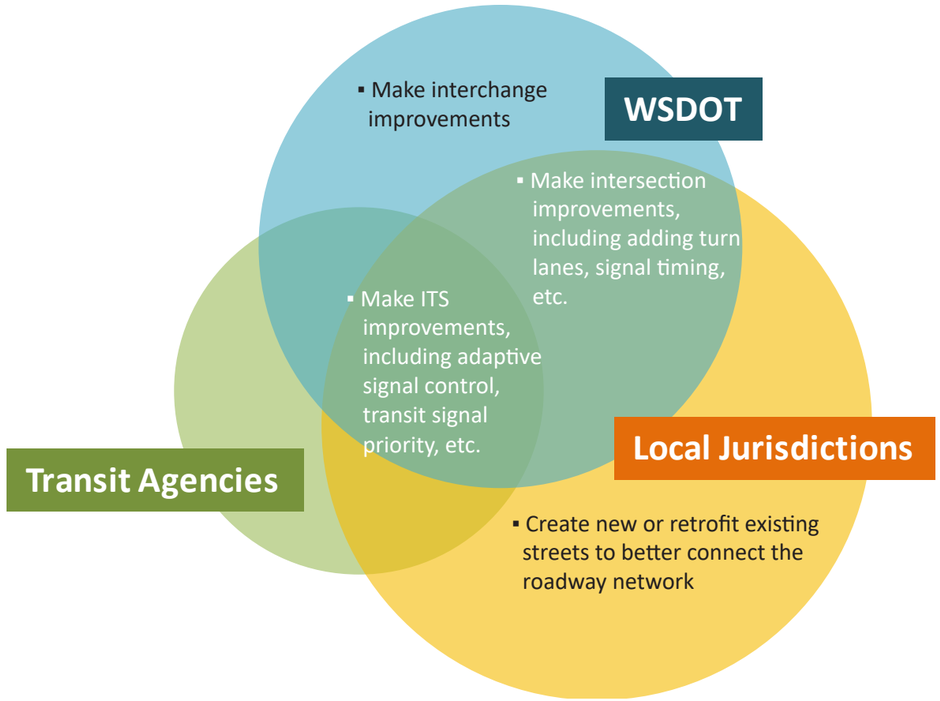
ALIGN LAND USE AND TRANSIT POLICIES AND PLANS

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
1. Create comprehensive, subarea, and station area plans	These are the primary planning documents at the city, neighborhood, and station area scales, and establish the vision, priorities, and needed activities in at the relevant scale.	Certainty about vision, priorities, and needed activities.	Local jurisdictions play the lead role in developing these plans and should consult with transit agencies and WSDOT as part of the planning process.	These planning processes range from 6-24 months.	$ Primarily staff time and potentially some consultant support.	Challenges around agreement on proposed visions and achieving consensus on the final plan.	South Downtown Tacoma Subarea Plan.
2. Create long range, system, and strategic/transit development plans	These are the primary planning documents for transit agencies and basically distinguish between near-term and long-term vision, priorities, and activities.	Certainty about transit agency vision, priorities, and needed activities.	Transit agencies play the lead role in developing these plans and should consult with local jurisdictions and WSDOT as part of the planning process.	These planning processes range from 6-24 months.	$ Primarily staff time and potentially some consultant support.	Challenges around agreement on the proposed visions with the resources available, as well as achieving consensus on the final plan.	All transit agencies are in the process of adopting, or recently adopted, long range/system plans.
3. Site major transit capital investments in locations that are conducive to maximum transit benefit	This refers primarily to light rail stations, but also applies to new transit centers associated with bus rapid transit stations as well as new transit hubs.	Greater potential access-shed for all modes.	Major transit capital facilities are typically developed by Sound Transit, but must actively involve all appropriate stakeholders when selecting alignments and station locations.	Alternatives analyses typically take 18 months to three years.	$$$-$$$$ The alternatives analysis phase typically runs in the several to tens of millions of dollars.	Trade-offs associated with different alignments and station locations may make consensus difficult to achieve.	Most recently, the Federal Way Link Extension.
4. Appropriately zone areas surrounding major sites of transit service for compatible development	A more precise directive to ensure that some consideration is given to matching the surrounding area to the type of transit service available, given other local and transit agency priorities.	Maximizes the potential benefits in the immediate vicinity of a major site of transit, and can help make the transit market for the service available as well.	As the land use authority, local jurisdictions play the lead role in zoning around major sites of transit service. Transit agencies and other stakeholders in the station area should be actively involved as well.	Rezones can take anywhere from 6-24 months.	$ Primarily staff time and potentially some consultant support.	Challenges around agreement on proposed visions and achieving consensus on the final plan.	The City of Shoreline's planning work at the 145th and 185th Street Stations

ALIGN LAND USE AND TRANSIT POLICIES AND PLANS

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
5. Develop and implement a robust transit access policy in support of local and regional goals.	Transit access policies clearly establish expectations around an entity's role and priorities with respect to transit access.	Creates certainty around an entity's expectations and role when it comes to transit access.	The agency/jurisdiction adopting the policy plays a lead role and should engage with relevant stakeholders in its development.	Policy development process can take anywhere from 6-12 months.	$ Primarily staff time and potentially some consultant support.	Should occur in an open, transparent way with adequate public and stakeholder participation to ensure consensus is reached.	Sound Transit's System Access Policy.
6. Ensure transit access policy is reflected in development codes and regulations	Because developers play a significant role in the provision of certain transit access improvements, it is important that specific direction is reflected in the appropriate regulatory framework.	Creates certainty that transit access policies will be implemented as envisioned by developers.	Since local jurisdictions develop these codes and regulations, they play a key role and should work closely with transit agencies to ensure they reflect the spirit of the policy.	Policy development process can take anywhere from 6-12 months.	$ Primarily staff time and potentially some consultant support.	The most common issue is that this step doesn't occur and the spirit of the policy is not reflected in practice.	This occurs in various degrees throughout the region.
7. Develop and implement a robust transit-oriented development policy in support of local and regional goals	Transit-oriented development policies clearly establish expectations around an entity's role and priorities with respect to the type and character of development near major sites of transit service.	Creates certainty around an entity's expectations and role when it comes to transit-oriented development.	The agency/jurisdiction adopting the policy plays a lead role and should engage with relevant stakeholders in its development.	Policy development process can take anywhere from 6-12 months.	$ Primarily staff time and potentially some consultant support.	Should occur in an open, transparent way with adequate public and stakeholder participation to ensure consensus is reached.	Sound Transit's TOD Policy.
8. Develop and implement a surplus land policy in support of local and regional goals.	A surplus land policy clearly establishes expectation around an entity's role with surplus property near major sites of transit service. Sound Transit and WSDOT are the agency's most implicated by this policy issue.	Creates certainty around an entity's expectations and role when it comes to disposing of surplus property.	The agency/jurisdiction adopting the policy plays a lead role and should engage with relevant stakeholders in its development.	Policy development process can take anywhere from 6-12 months.	$ Primarily staff time and potentially some consultant support.	Should occur in an open, transparent way with adequate public and stakeholder participation to ensure consensus is reached.	Sound Transit's Surplus Land Policy.

ENHANCE STREET NETWORK CONNECTIVITY



Access Improvement	*Local Jurisdictions*	*Transit Agencies*	*WSDOT*
1. Create new or retrofit existing streets to better connect the roadway network			
2. Make intersection improvements, including adding turn lanes, signal timing, etc.			
3. Make interchange improvements			
4. Make intelligent transportation system (ITS) improvements, including adaptive signal control, transit signal priority, etc.			

Legend

Adopt policy · **Identify in planning documents** · **Advise, consult, and participate** · **Construct** · **Operate and maintain** · **Contribute funding**

The Value of This Strategy

Street networks are the bones on which land use patterns and transit service depend. They shape the urban form and influence the land use character of communities. Street networks also shape the type and scale of vehicular and nonmotorized travel, and impact everything from levels of congestion to safety and pedestrian comfort.

Improving how street networks connect and perform can make it easier for people to get to major sites of transit service and can improve transit performance to and from these places. Furthermore, street network improvements typically lead to benefits for all users.

The Value of Working Together

There are only a few tools for improving street network connectivity, with most of the responsibility for implementing these tools falling to local jurisdictions and WSDOT, as they typically have authority over street right of way. All three entities have made and likely will continue to make intelligent transportation system (ITS) investments.

While small in number, tools to improve street network connectivity are typically significant in scale and therefore demand close collaboration. When implemented in a coordinated fashion, these investments can result in significant transit access benefits.

Roles and Responsibilities

Local Jurisdictions. Local jurisdictions play a substantial role when it comes to street network improvements because the operation and management of roadways is a primary function of local government. These projects are also significant in scale with long lead times, potentially disruptive construction impacts, and ongoing operation and maintenance, all led by a local jurisdiction. These projects are usually identified in planning documents and may be subject to specific environmental planning processes as well.

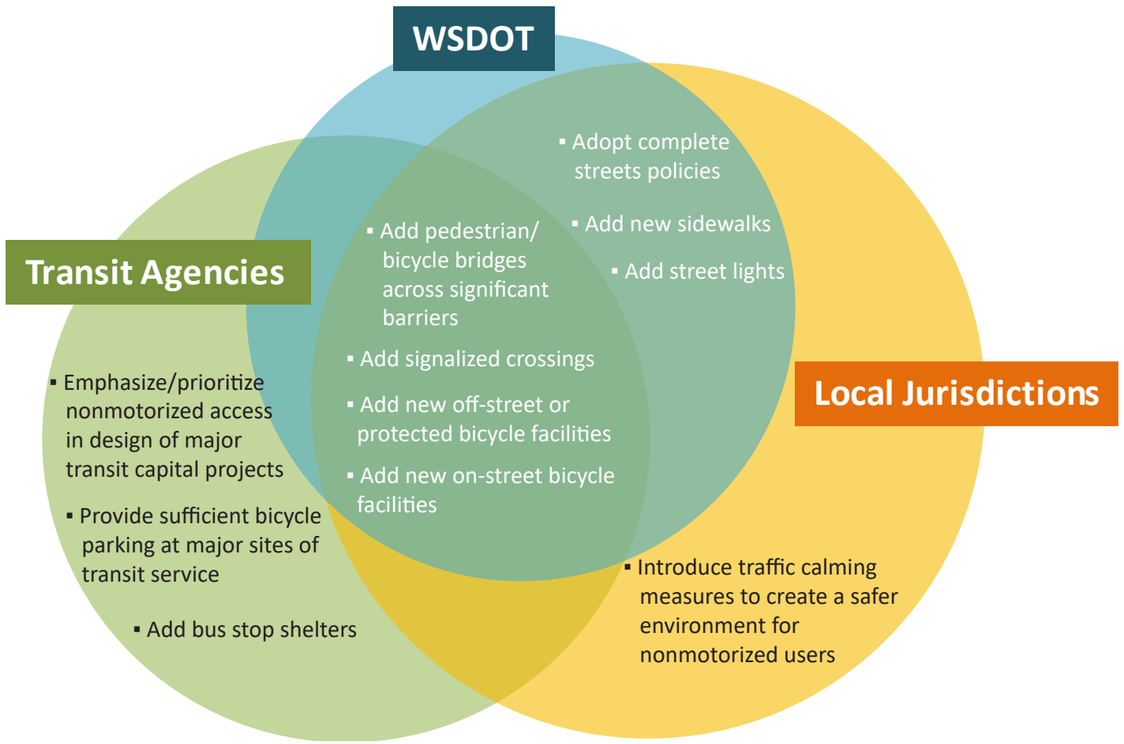
Transit Agencies. Apart from ITS projects like transit signal priority investments, transit agencies do not lead the implementation of street network connectivity projects given that they do not have authority over the road network. Transit agencies should be active partners in the project development phases of these projects and communicate their needs and expectations for the eventual use of new/retrofitted streets, intersections, and interchanges. And while most local transit agencies are unlikely to contribute funding to these projects, Sound Transit may as part of their capital projects.

WSDOT. WSDOT's role is similar in many respects to a local jurisdiction's role when state facilities are involved. These projects are typically all of a significant scale, as befits state facilities. WSDOT is also likely to play something more than simply a participatory role when a local jurisdiction's project affects a state facility to ensure that the project in question will not significantly affect said facility. This could mean that WSDOT has some influence over the eventual shape of a project.

ENHANCE STREET NETWORK CONNECTIVITY

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
1. Create new or retrofit existing streets to better connect the roadway network	New streets can break up superblocks and improve the overall street network. Retrofitting existing streets can make them more accommodating to transit and improve corridor performance for all users.	Additional paths to reach transit. Potential improvements to transit performance.	Local jurisdictions play the lead role in developing and implementing these projects and must consult with transit agencies and WSDOT as appropriate.	Typically a multi-year process involving lengthy design and construction phases that require robust public input and engagement.	$$$-$$$$ Can be very costly given the scale. Typically requires multiple funding sources at both local, state, and federal scales.	There may be resistance from communities that will bear the biggest impact; construction can be disruptive and time-consuming, potentially requiring mitigation activities.	23rd Ave project in Seattle; proposed new streets in downtown Federal Way
2. Make intersection improvements, including adding turn lanes, signal timing, etc.	Delay at intersections impacts all users. Improvements to minimize delay take a variety of forms in multiple combinations and can be targeted to address specific issues while maximizing benefit to transit operations.	Speed and reliability improvements for transit. Potentially a more comfortable experience for nonmotorized users.	Local jurisdictions are likely to play a lead role with key support from transit agencies (especially if a project benefits transit operations) and WSDOT (if it involves a state facility).	Timing can vary depending on the scale of a specific project, but often requires several months to more than a year.	$$$-$$$$ Can be very costly given the scale. Typically requires multiple funding sources at both local, state, and federal scales.	Primarily managing disruption from the construction phase; potentially managing the perception that a project benefits trasnit at the expense of other modes.	Metro RapidRide program features these elements
3. Make interchange improvements	Interchanges are the primary entry and exit points of limited access facilities. Delays in any part of their function can impact all users and in some cases result in poor transit speed and reliability.	Speed and reliability improvements for transit.	Given that interchanges are features of state facilities, WSDOT plays a central role in these projects, and must work closely with the local jurisdictions and transit agencies impacted by specific improvements.	Timing can vary depending on the scale of a specific project, but often requires several months to more than a year.	$$$-$$$$ Can be very costly given the scale. Typically requires multiple funding sources at both local, state, and federal scales.	Assembling funding as well as managing disruption from the construction phase.	Swift Green Line work at I-5 and 128th Street interchange
4. Make intelligent transportation system (ITS) improvements, including adaptive signal control, transit signal priority, etc.	Intelligent transportation systems (ITS) refers to investments that react to different incident types in ways that reduces congestion and improves mobility for all users.	Speed and reliability improvements for transit.	ITS improvements are traditionally partnership projects and typically must be as they affect both street operations and transit performance.	Installation of hardware and software typically requires several months.	$$-$$$ As multi-agency projects, costs are shared and funding comes from a variety of sources, which can add complexity to the project.	Assembling funding and ensuring that projects attain mobility, access, and circulation benefits.	Snohomish County et al. Adaptive Signal Control System

IMPROVE THE NONMOTORIZED ENVIRONMENT



Access Improvement	*Local Jurisdictions*	*Transit Agencies*	*WSDOT*
1. Adopt complete streets policies			
2. Emphasize and prioritize nonmotorized access in the design of major transit capital facilities			
3. Add new off-street or protected bicycle facilities			
4. Add new on-street bicycle facilities			
5. Add pedestrian/bicycle bridges across significant barriers			
6. Introduce traffic calming measures to create a safer environment for nonmotorized users			
7. Add new sidewalks			
8. Add signalized crossings			
9. Add street lights			
10. Provide sufficient bicycle parking at major sites of transit service			
11. Add bus stop shelters			

Legend

Adopt policy · Identify in planning documents · Advise, consult, and participate · Construct · Operate and maintain · Contribute funding

The Value of this Strategy

Many transit trips in the region begin or end on foot or on bike. As such, making sure the nonmotorized environment is safe and comfortable can substantially improve transit access. This is true of the paths to and from major sites of transit service as well as of amenities available at transit stops and stations.

Nonmotorized improvements are typically smaller scale investments that also provide capacity for trips other than those accessing transit thus creating additional benefits and transportation options, or improving the comfort and amenities of existing facilities.

The Value of Working Together

Local jurisdictions and WSDOT play a major role in nonmotorized improvements that increase access to transit, primarily due to the fact they have authority over the right of way on which these investments occur. Transit agencies have more influence at sites they own and operate as well as at new facilities that they plan to construct.

Considering the impact on transit access from nonmotorized investments should occur whether in established or emerging transit environments. Making these investments can create opportunities for maximizing both transit access and other benefits these types of projects provide.

Roles and Responsibilities

Local Jurisdictions. As owners of local right of way, local jurisdictions are important providers of nonmotorized infrastructure in the region. Based on applicable policies and plans, local jurisdictions allocate resources to the construction and maintenance of sidewalks, bicycle facilities, and traffic calming measures that result in safer, more comfortable nonmotorized environments.

Transit Agencies. The role of transit agencies in improving the nonmotorized environment has to do with identifying priority corridors that they believe would increase transit access and ridership; emphasizing nonmotorized access in the design of major transit capital investments; and ensuring satisfactory amenities at major sites of transit service, including bicycle parking.

WSDOT. As owners of state right of way, WSDOT is an important provider of nonmotorized infrastructure in the region. Based on applicable policies and plans, WSDOT allocates resources to the construction and maintenance of sidewalks, bicycle facilities, and traffic calming measures that result in safer, more comfortable nonmotorized environments.

IMPROVE THE NONMOTORIZED ENVIRONMENT

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
1. Adopt complete streets policies	Complete streets policies clearly establish a jurisdiction's vision and priorities for activity on its streets and can help direct resources to specific areas or modal needs	Certainty about jurisdiction priorities and commitment to improving the nonmotorized experience.	Complete streets plans typically apply at the local jurisdiction level only.	Timing can vary depending on specific circumstances, but unlikely to take more than one year	$ Primarily staff time and likely with some consultant support.	There are typically few issues or challenges with adopting complete street policies, but there may be some resistance if people perceive it as benefiting certain modes over others.	Many jurisdictions in the region have complete streets policies.
2. Emphasize and prioritize nonmotorized access in the design of major transit capital facilities	An extension of an agency's transit access policy, but with specific attention paid to how nonmotorized users will get to and what they will need once they get to major transit capital facilities.	Increased ridership. Improved nonmotorized access, safety, and comfort.	Major transit capital facilities are typically developed by Sound Transit, but must actively involve local jurisdictions for assistance in emphasizing nonmotorized access.	The design phase of a major transit capital facility can take several years.	$$$$ The preliminary engineering and design phases of a major transit capital project can be several tens to more than $100M.	Trade-offs associated with different types of nonmotorized access improvements to implement may make consensus difficult to achieve.	Federal Way Link Extension.
3. Add new off-street or protected bicycle facilities	Functionally separated bicycle infrastructure in the form of an off-street facility or a cycle-track that provides protection from vehicle traffic.	Increased ridership. Improved nonmotorized access, safety, and comfort.	Typically implemented by local jurisdictions, with varying levels of participation by transit agencies and WSDOT.	Timing can vary depending on specific circumstances, but between design, construction, and public engagement, overall process is likely to take at least one year.	$$-$$$ Higher cost relative to other nonmotorized investments because of facility quality. Costs depend on segment length and on right of way needs.	Typically requires trade-offs, especially in the event that installing a protected bicycle facility involves removing a parking or travel lane. Can see resistance if the trade-off is perceived as too great.	Broadway and 2nd Avenue protected bike lanes in Seattle.
4. Add new on-street bicycle facilities	New bicycle infrastructure that is incorporated into existing street right-of-way, ideally in its own painted lane.	Increased ridership. Improved nonmotorized access, safety, and comfort.	Typically implemented by local jurisdictions, with varying levels of participation by transit agencies and WSDOT.	Timing can vary depending on specific circumstances, but adding new on-street facilities should only take a few months as it's likely to only require restriping a roadway.	$$-$$$ Costs will depend on segment length and on right of way needs.	Typically requires trade-offs, especially in the event that installing a protected bicycle facility involves removing a parking or travel lane. Can see resistance if the trade-off is perceived as too great.	On-street bicycle facilities are typically added in roadway reconstruction projects.

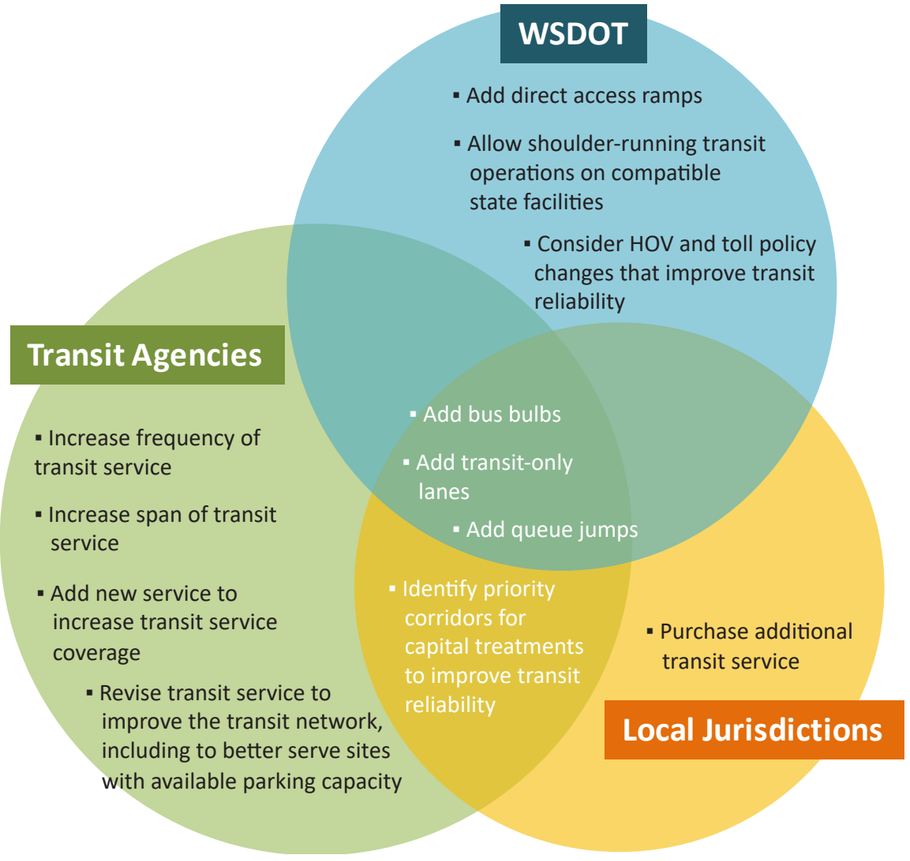
IMPROVE THE NONMOTORIZED ENVIRONMENT

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
5. Add pedestrian/bicycle bridges across significant barriers	Significant nonmotorized infrastructure that provides a separated crossing of significant barriers (e.g. freeways, railroad tracks).	Increased ridership. Improved nonmotorized access, safety, and comfort.	Often depends on the barrier in question as well as the agency benefiting most from the improved access. These type of projects often involve multiple partners.	Planning, design, and construction of these facilities can be a multi-year process.	$$-$$$ Typically a higher cost nonmotorized project that can require multiple partners and multiple funding sources.	Assembling funding can introduce complexity to project execution. Trade-offs associated with different alternatives may make consensus difficult to achieve.	Northgate Bike/Ped Bridge.
6. Introduce traffic calming measures to create a safer environment for nonmotorized users	Refers to a number of specific tactics (including, reducing speed limits, adding speed bumps, installing raised crosswalks, etc.) that calms traffic and increases comfort for nonmotorized users.	Increased ridership. Improved nonmotorized access, safety, and comfort.	Typically implemented by local jurisdictions, with varying levels of participation by transit agencies and WSDOT.	Timing can vary depending on the scale of measures taken, but a 6-18 month process is likely.	$-$$ Relatively low-cost individually with overall costs tied to scale of the improvements.	Process challenges associated with changing the status quo character of a street may create resistance from parts of the community.	Greenways movement.
7. Add new sidewalks	This can refer to improving existing sidewalks that are inadequate or installing new sidewalks.	Increased ridership. Improved nonmotorized access, safety, and comfort.	Typically implemented by local jurisdictions, with varying levels of participation by transit agencies and WSDOT.	Timing can vary depending on scale. Relatively small sidewalk improvements can be accomplished in a few months with larger efforts taking many years.	$-$$$ Cost may seem low per linear foot, but can be significant over a large area. Right of way issues may also influence overall cost.	Right of way needs are the most common challenge when adding new sidewalks.	Often new sidewalks are added as part of Safe Routes to Schools projects.
8. Add signalized crossings	A new signalized crossing provides nonmotorized users security in crossing streets with moderate to heavy vehicle volumes.	Increased ridership. Improved nonmotorized access, safety, and comfort.	Typically implemented by local jurisdictions, with varying levels of participation by transit agencies and WSDOT.	Timing varies, but typically requires several months at least to implement.	$$ Relatively low cost as far as street improvements go, but potential associated impacts (e.g. new street marking, curb cuts) can increase costs.	Potential/perceived impacts on traffic flow may create resistance from parts of the community.	Often new signalized crossings are included as part of corridor construction projects (e.g. 23rd Ave project in Seattle).

IMPROVE THE NONMOTORIZED ENVIRONMENT

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
9. Add street lights	Street lights provide a feeling of safety and security and could induce additional nonmotorized tripmaking.	Improved safety and comfort for nonmotorized users.	Typically implemented by local jurisdictions, with varying levels of participation by transit agencies and WSDOT.	Timing can vary depending on scale, but typically requires a few months to implement.	$-$$ Costs relate to scale of investment, potential right of way needs, and any utility/electrical needs associated with the project.	Beyond right of way issues, few issues arise from these types of projects.	Often street lights are included as part of corridor construction projects (e.g. 23rd Ave project in Seattle).
10. Provide sufficient bicycle parking at major sites of transit service	Sufficient and secure bicycle storage can attract additional bicyclists to major sites of transit service, espcially when there is good nonmotorized infrastructure in the vicinity.	Increased ridership. Improved nonmotorized access, safety, and comfort.	This is typically under the purview of the owner/operator of the transit facility in question.	If a new facility, sufficient parking should be provided upon opening. Otherwise, adding new parking typically takes several months.	$-$$ Depends on the amount and quality of bicycle parking. There is potential revenue associated with secure bicycle parking as well.	Common issues are around whether the bicycle parking provided is sufficient and secure enough to meet demand.	U Link/University of Washington Station.
11. Add bus stop shelters	Bus stop shelters provide a place for riders to wait with some protection from the elements.	Improved safety and comfort for transit riders.	Transit agencies have primary responsibility and must work with the relevant local jurisdiction where a new shelter is considered, and potentially with other transit agencies if it is a shared stop.	Timing can vary depending on scale, but typically requires a few months to implement.	$$ Depends on number and features associated with bus stop shelters. Potential right of way issues may increase cost.There will be ongoing maintenance costs.	Beyond right of way issues, few issues arise from these types of projects.	Typically new shelters are added in corridors seeing improvements in service quality (e.g. new RapidRide and Swift lines).

INCREASE TRANSIT SERVICE, FREQUENCY, RELIABILITY, AND COVERAGE



Access Improvement	*Local Jurisdictions*	*Transit Agencies*	*WSDOT*
1. Identify priority corridors for capital treatments to improve transit reliability	Identify, Advise	Identify, Advise	Advise
2. Add transit-only lanes	Advise, Construct, Operate, Contribute	Advise, Contribute	Advise, Construct, Operate, Contribute
3. Add queue jumps	Advise, Construct, Operate, Contribute	Advise, Contribute	Advise, Construct, Operate, Contribute
4. Add bus bulbs	Advise, Construct, Operate, Contribute	Advise, Contribute	Advise, Construct, Operate, Contribute
5. Add direct access ramps	Advise, Contribute	Advise, Contribute	Advise, Construct, Operate, Contribute
6. Allow shoulder-running transit operations on compatible state facilities		Advise, Operate	Adopt, Construct
7. Purchase additional transit service	Advise, Contribute	Advise, Operate	
8. Increase frequency of transit service	Advise	Operate, Contribute	
9. Increase span of transit service	Advise	Operate, Contribute	
10. Add new service to increase transit service coverage	Advise	Operate, Contribute	
11. Revise transit service to improve the network, including to better serve sites with available parking capacity	Advise	Operate, Contribute	
12. Consider HOV and toll policy changes that improve transit reliability	Advise	Advise	Adopt

Legend

Adopt policy · Identify in planning documents · Advise, consult, and participate · Construct · Operate and maintain · Contribute funding

The Value of this Strategy

People want to access high quality transit service that gets them where they want to go quickly and reliably. Increasing the amount of fast, dependable transit service serving key regional destinations will necessarily increase transit access in the region.

These types of improvements can be made both by increasing the quantity of transit service available and also by making changes to the streets that transit operates on to improve the speed and reliability of that service.

The Value of Working Together

All entities have a role to play in improving transit service frequency, reliability, and coverage. Transit agencies obviously provide a baseline of transit service and, depending on resource availability, can increase service span, frequency, and coverage.

Local jurisdictions and WSDOT each have influence over the operating environments of the streets they own and maintain. Ensuring that the level and type of transit service is in sync with the roads it operates on has huge implications for the performance of that service and people's willingness to use it.

Roles and Responsibilities

Local Jurisdictions. Local jurisdictions play a central role in identifying the priority corridors for transit service in their communities. Subsequently, they play the primary role in constructing the capital improvements necessary to support fast, reliable transit on those corridors. Local jurisdictions should actively participate in a transit agency's service development process, and can, in some parts of the region, purchase additional transit service.

Transit Agencies. Transit agencies play a central role in identifying the priority corridors for the transit service they deliver. Subsequently, they deliver that service at certain spans and frequencies on those corridors, and may also contribute funding to the cost of capital improvements that result in fast, reliable service.

WSDOT. As the owner of state highway facilities, WSDOT and the state legislature have significant influence over certain policies—HOV and toll, specifically—that can dramatically improve the performance of transit service. In addition, WSDOT plays the primary role in constructing the capital improvements on state facilities that support fast, reliable transit service.

INCREASE TRANSIT SERVICE, FREQUENCY, RELIABILITY, AND COVERAGE

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
1. Identify priority corridors for capital treatments to improve transit reliability	Establishes clarity for both transit agencies and local jurisdictions the facilities that are expected to serve as significant transit corridors.	Primarily certainty with respect to where transit will operate and the types of improvements needed in the corridor (regardless of who implements).	Primarily a collaborative effort between the relevant transit agency and the owner of the corridor, whether that is a local jurisdiction or WSDOT.	Timing can vary depending on the number of corridors, and should occur as part of the transit planning process that typically ranges from 6-24 months.	$ Identifying corridors should typically occur as part of existing planning processes and typically requires staff time as part of those efforts.	Ensuring collaboration and consensus between transit agencies and roadway authorities.	Community Transit Long Range Transit Plan.
2. Add transit-only lanes	Transit-only lanes are dedicated lanes for transit vehicles.	Increased ridership. Improved transit speed and reliability.	Requires close collaboration between local jurisdictions and transit agencies (and WSDOT if this involves a state facility) to plan, design, fund, and implement transit-only lanes.	Timing can vary depending on specific circumstances, but likely to take at least 1 year.	$$-$$$$ Costs vary depending on existing roadway characteristics, corridor length, and right of way needs.	Assembling funding. Managing a process that may involve the loss of parking or general purpose travel lane and potential resistance that might result.	RapidRide and SWIFT corridor development processes.
3. Add queue jumps	Queue jumps are dedicated right of way at intersections that provide transit vehicles priority in moving through intersections.	Increased ridership. Improved transit speed and reliability.	Requires close collaboration between local jurisdictions and transit agencies (and WSDOT if this involves a state facility) to plan, design, fund, and implement queue jumps.	Timing can vary depending on specific circumstances, but likely to take at least 1 year.	$$-$$$ Costs vary depending on existing roadway and intersection characteristics, and right of way needs.	Assembling funding. Managing a process that may involve the loss of parking or general purpose travel lane and potential resistance that might result.	RapidRide and SWIFT corridor development processes.
4. Add bus bulbs	A bus bulb is an extension of the sidewalk that functions to allow a transit vehicle to stop without exiting the travel lane, reducing the time necessary to re-enter traffic after picking up riders.	Increased ridership. Improved transit speed and reliability.	Requires close collaboration between local jurisdictions and transit agencies (and WSDOT if this involves a state facility) to plan, design, fund, and implement bus bulbs.	Timing can vary depending on specific circumstances, but likely to take at least 1 year.	$$-$$$ Costs vary depending on existing roadway characteristics, the number of bus bulbs to install, and right of way needs.	Assembling funding. Potentially managing issues associated with travel time impacts to general purpose traffic.	RapidRide and SWIFT corridor development processes.

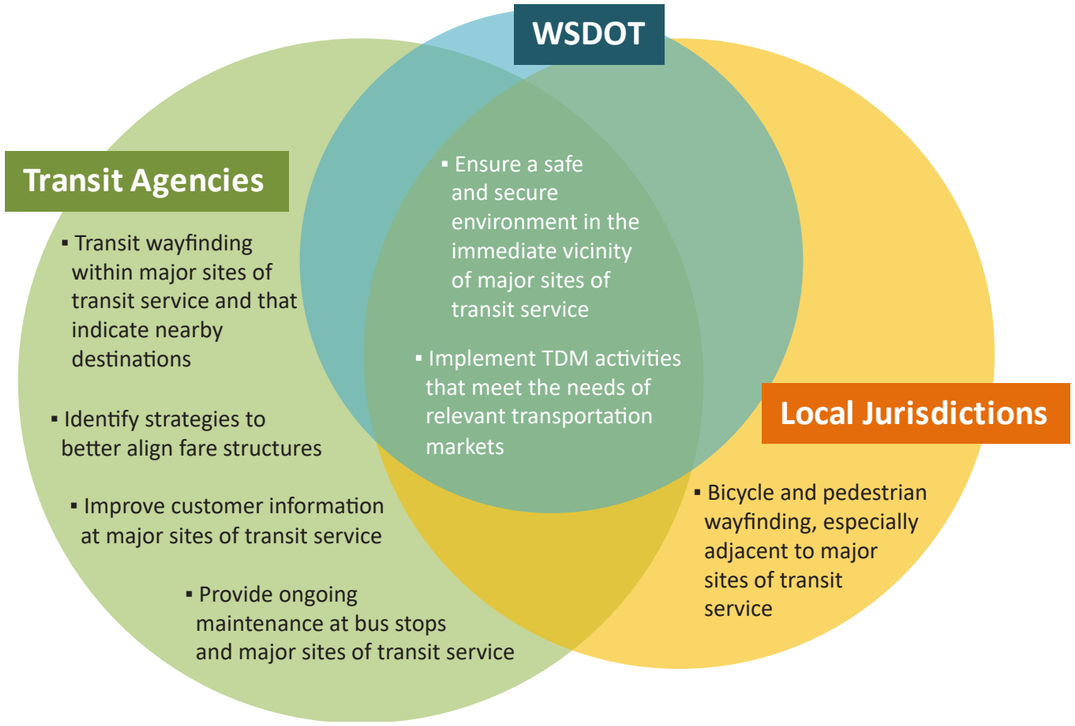
INCREASE TRANSIT SERVICE, FREQUENCY, RELIABILITY, AND COVERAGE

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
5. Add direct access ramps	Direct access ramps allow transit vehicles to directly access HOV lanes from major sites of transit service.	Increased ridership. Improved transit speed and reliability.	Direct access ramps are typically planned, designed, and built by WSDOT in close collaboration with transit agencies, the affected local jurisdiction, and FHWA.	Timing can vary depending on specific circumstances, but the overall process to plan, design, and build direct access ramps is a multi-year process.	$$$$ Direct access ramps are significant capital investments associated with limited access facilities.	Funding assembly.	Eastgate Park and Ride direct access ramps.
6. Allow shoulder-running transit operations on compatible state facilities	This would functionally create a transit-only lane on major state facilities, most specifically portions of the interstate system.	Increased ridership. Improved transit speed and reliability.	WSDOT will play a major role given their ownership of state facilities, and must work closely with transit agencies and their federal partners to make this happen.	This practice doesn't currently occur, but will now that ST3 has passed. Will likely require more than 1 year to complete.	$$-$$$$ Costs will vary depending on the existing characteristics, length of shoulder runing operations, and capital needs to support this type of transit operation.	Risks inherent insofar as this practice has never occurred in the region and that there are few places nationally doing this as well.	I-405 allows shoulder running in some sections; more will be identified as part of the early deliverables of ST3.
7. Purchase additional transit service	This would allow local jurisdictions to buy additional service hours from a transit agency to increase transit service.	Additional transit service.	Would involve some discussions between a local jurisdiction and transit agency to determine amount of service that can be purchased and how that service would be deployed.	Timing is variable given lack of regional examples of this practice, but likely to take several months or more depending on relevant public process and potential vote.	$$-$$$$ Depends on amount of service authorized by whatever revenue source is used.	Mostly that this ultimately becomes a political process, culminating in a public vote, and subject to the trade-offs and challenges inherent in that.	King County's Community Mobility Contracts and City of Seattle's Proposition 1 passed in November 2014.
8. Increase frequency of transit service	This would result in transit operating more frequently in specific corridors.	Additional transit service.	Transit agencies typically have a framework for adding service and would likely follow it to increase transit service frequency.	Timing depends on available resources. If there are resources, a several month process to determine where to allocate that service would occur.	? Limited to available funding without 1) robust revenue growth (that may not be sustainable) or 2) a contract to purchase additional service.	Trade-offs inherent in the allocation of scarce resources.	King County Metro Service Guidelines.

INCREASE TRANSIT SERVICE, FREQUENCY, RELIABILITY, AND COVERAGE

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
9. Increase span of transit service	This would result in transit operating for longer parts of the day in specific corridors.	Additional transit service.	Transit agencies typically have a framework for adding service and would likely follow it to increase transit span of service.	Timing depends on available resources. If there are resources, a several month process to determine where to allocate that service would occur.	? Limited to available funding without 1) robust revenue growth (that may not be sustainable) or 2) a contract to purchase additional service.	Trade-offs inherent in the allocation of scarce resources.	King County Metro Service Guidelines.
10. Add new service to increase transit service coverage	This would result in transit operating in new areas that aren't currently served by transit service.	Additional transit service.	Transit agencies typically have a framework for adding service and would likely follow it to add new transit service coverage.	Timing depends on available resources. If there are resources, a several month process to determine where to allocate that service would occur.	? Limited to available funding without 1) robust revenue growth (that may not be sustainable) or 2) a contract to purchase additional service.	Trade-offs inherent in the allocation of scarce resources.	King County Metro Service Guidelines.
11. Revise transit service to improve the transit network, including to better serve sites with available parking capacity	Major service revisions are typically rare, and are mostly likely to occur when a new light rail station or BRT corridor opens.	Increased ridership.	Transit agencies would lead this effort working closely with partner agencies, affected jurisdictions, the general public, and other relevant stakeholders.	Likely a several-month long analytic and engagement process. It is an open question as to when planning should occur in advance of a light rail extension or BRT corridor opening.	$ Primarily staff time with potentially some consultant support.	Managing a public process that may result in perceived winners and losers.	U Link bus-rail integration effort.
12. Consider HOV and toll policy changes that improve transit reliability	HOV and toll policies affect HOV lane and overall system performance. Because HOV and toll lanes function as transit right-of-way, policy changes are likely to impact overall transit performance in those corridors.	Increased ridership. Improved transit speed and reliability.	HOV and toll policy issues typically involve all parties in processes typically overseen by WSDOT and, for toll policy specifically, the Washington State Transportation Commission.	Timing varies on these policy processes. Toll rate setting occurs over several years but can be changed relatively quickly depending on specific circumstances.	$-$$ Low dollar costs in terms of a policy process, usually involving staff time and likely some consultant support.	These policy issues can be very controversial.	I-405 Express Toll Lanes.

ELEVATE THE TRANSIT USER EXPERIENCE



Access Improvement	*Local Jurisdictions*	*Transit Agencies*	*WSDOT*
1. Identify strategies to better align fare structures			
2. Implement TDM activities that meet the needs of relevant transportation markets			
3. Ensure a safe and secure environment in the immediate vicinity of major sites of transit service			
4. Transit wayfinding within major sites of transit service and that indicate nearby destinations			
5. Improve customer information at major sites of transit service			
6. Bicycle and pedestrian wayfinding, especially adjacent to major sites of transit service			
7. Provide ongoing maintenance at bus stops and major sites of transit service			

Legend

Adopt policy · **Identify in planning documents** · **Advise, consult, and participate** · **Construct** · **Operate and maintain** · **Contribute funding**

The Value of this Strategy

People are more likely to use transit if their experience doing so is a pleasant and comfortable one. Creating a user experience for transit users that is safe, easy, and seamless reduces barriers for people who might otherwise opt for modes other than transit.

Perceptions of safety, the availability of customer information, and the ease or difficulty of getting to or from a major site of transit service all interact to influence someone's decision to take transit. Improvements in these areas can have significant effects in changing the decision-making calculus.

The Value of Working Together

A transit user's experience can be affected while approaching or exiting a transit stop or station, while waiting for whatever service is being used, and while onboard a vehicle. A bad experience in just one of these segments can make the whole trip worse than the sum of its parts.

Different entities have varying levels of influence on these trip segments. Transit agencies obviously play a central role, but in some cases must work with local jurisdictions or WSDOT to ensure a safe, secure environment and so that riders know how to get to and from a transit stop or station and their final destination.

Roles and Responsibilities

Local Jurisdictions. Local jurisdictions can have considerable influence over a transit user's experience and therefore willingness to access and use transit. Specifically, local jurisdictions and particularly their local law enforcement agencies have a clear role in ensuring that areas around major sites of transit service are safe and secure. Local jurisdictions are also responsible for providing wayfinding elements that help users find major sites of transit service using nonmotorized modes like walking and biking.

Transit Agencies. Transit agencies also have considerable influence over a transit user's experience and therefore willingness to access and use transit. An agency's influence is primarily within the footprint of a major site of transit service and includes elements like feelings of safety and security, accurate customer information, wayfinding elements that help orient users within the site and within the immediate vicinity of the site, and keeping well-maintained facilities.

WSDOT. WSDOT's role in this area is relatively minor and applies primarily to places where they have an operational or property interest. In these cases, their role is ensuring that a facility is safe and secure, that there are accurate customer information and wayfinding elements, and that the facility is well-maintained.

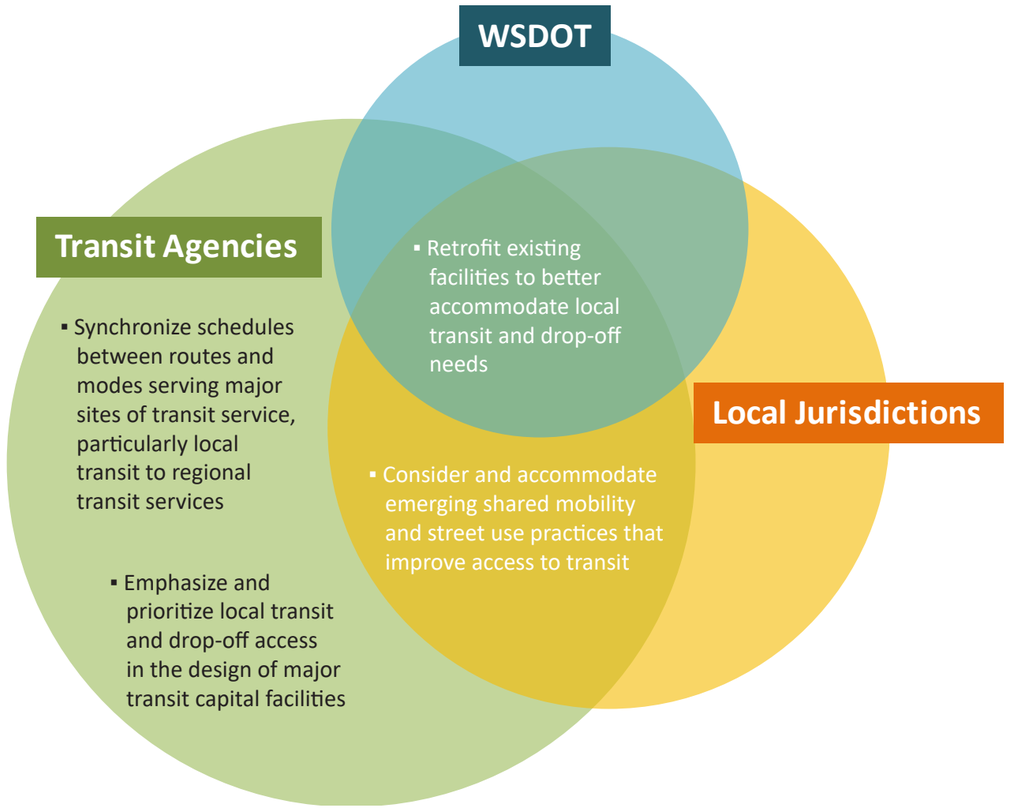
ELEVATE THE TRANSIT USER EXPERIENCE

Tool	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
1. Identify strategies to better align fare structures	Recognizes that in spite of a shared farecard media in ORCA, there are different fare structures throughout the region, which can create confusion for transit riders.	Easier to use system.	Primarily confined to transit agencies with adequate opportunities for input from other stakeholders.	Elements of this exercise are occuring in late 2016 as part of the Next Generation ORCA project.	$-$$$ Identifying strategies is a low-cost exercise but the implications of those strategies may have significant impacts on system design, operation, and equipment needs.	Managing impacts to an agency's fare revenues versus impacts to system complexity and user experience.	Next Generation ORCA Regional Fare Forums.
2. Implement TDM activities that meet the needs of relevant transportation markets	A variety of strategies and activities that are intended to reduce single-occupant vehicle travel and increase travel by modes other than driving alone.	Increased ridership.	TDM activities are implemented by a variety of transit agencies, local jurisdictions, employers, and transportation management associations who work together as needed on different activities.	Depends on the activity, but ramp-up is typically short and TDM activities usually are short in nature.	$ Most TDM activities are relatively low-cost to implement.	Challenging to measure impacts of TDM activities, especially over time.	In Motion and Curb the Congestion are two of many examples of TDM activities in the region.
3. Ensure a safe and secure environment in the immediate vicinity of major sites of transit service	This refers specifically to the physical and perceptual safety of riders at and near major sites of transit service.	Increased ridership. Improved safety and security.	Coordination needed between transit police affiliated with the relevant agency and law enforcement in the local jurisdictions where major sites of transit service are.	Variable and depending on the incidence and/or increased perception of safety and security concerns.	$-$$ Varies depending on specific circumstances and whether capital improvements may be necessary.	It can be very difficult to correct perceptual issues.	Security is provided in a number of ways throughout the region. Transit and relevant law enforcement agencies collaborate in response to site specific issues.
4. Transit wayfinding within major sites of transit service and that indicate nearby destinations	Refers to signage and other customer information that orients people within a transit center, while indicated nearby destinations they may be traveling to.	Easier to use system.	Coordination necessary between transit agencies, local jurisdictions, and other stakeholders with wayfinding systems to ensure that elements and approach align.	Depends. New wayfinding systems require a program design, funding, and implementation plan. Past that, ongoing maintenance is required and would be timed to service changes.	$$-$$$ Requires up front work and time to establish a consistent approach; new systems/elements installation; ongoing maintenance and preservation.	Multiple agencies with multiple brands and existing wayfinding elements. Ongoing maintenance is necessary but often neglected.	The Regional T.

ELEVATE THE TRANSIT USER EXPERIENCE

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
5. Improve customer information at major sites of transit service	As distinct from wayfinding, this refers to information riders might need as they wait, including next arrival, updates about delays/disruptions, etc.	Easier to use system. Ability for riders to make more informed decisions about route/trip selection.	The role of transit agencies is collecting, processing, and making available data that customers care about and application developers can use.	For printed information and static signage, ensuring new materials are available with service changes is essential. For dynamic information, collecting, processing, and making data available is an ongoing activity.	Heavy up-front investments in hardware, software, and consistent data.	Making consistent, high-quality data available on a regular basis is challenging in a multi-agency environment.	Open Transit Data initiative.
6. Bicycle and pedestrian wayfinding, especially adjacent to major sites of transit service	This specifically refers to ensuring that nonmotorized paths leading to major sites of transit service clearly tell nonmotorized users where the location itself is.	Easier to use system. Increased ridership.	Bicycle and pedestrian wayfinding elements are the responsibility of the local jurisdiction in which they are found.	Timing varies depending on the scale of pedestrian and bicycle wayfinding needs, with several months likely necessary for design and implementation, then ongoing maintenance as necessary.	$-$$ Costs vary depending on the scale of pedestrian and bicycle wayfinding needs, are typically low-cost, but do require ongoing maintenance.	Few, but maintenance and preservation of the signage is one.	There are emerging efforts underway to improve pedestrian wayfinding in downtown Seattle.
7. Provide ongoing maintenance at bus stops and major sites of transit service	This refers to ensuring that passenger facilities are in a state of good repair at both the stop and station scale.	Safer feeling system. More comfortable system.	Typically the role of the owner/operator of stops and stations is responsible for maintaining these facilities. Local jurisdictions may play a role in areas adjacent to stops and stations.	This activity is an ongoing one.	??? These are ongoing costs that are not insubstantial. Similarly, deferred maintenance can lead to higher costs.	Trade-offs inherent in the allocation of scarce resources.	There are existing operating and maintenance agreements in place for all major sites of transit service.

IMPROVE ACCESS VIA LOCAL TRANSIT AND DROP-OFF MODES



Access Improvement	*Local Jurisdictions*	*Transit Agencies*	*WSDOT*
1. Consider and accommodate emerging shared mobility and street use practices that improve access to transit			
2. Emphasize and prioritize local transit and drop-off access in the design of major transit capital facilities			
3. Retrofit existing facilities to better accommodate local transit and drop-off needs			
4. Synchronize schedules between routes and modes serving major sites of transit service, particularly local transit to regional transit services			

Legend

Adopt policy · Identify in planning documents · Advise, consult, and participate · Construct · Operate and maintain · Contribute funding

The Value of this Strategy

Many people in the region access transit using local transit connections or by getting dropped off at a major site of transit service (typically referred to as kiss-and-ride access). As high capacity transit expands north, south, and east, these modes will be an increasingly important form of access for the region's residents.

And though this certainly applies to major planned sites that are not yet online, there is also a need to address existing sites that may need improvements to adequately accommodate local transit and kiss-and-ride access needs.

The Value of Working Together

There are only a few tools available for increasing access via local transit and drop-off modes. These tools run the spectrum from ensuring relevant local transit and drop-off needs are built in to new facilities to retrofitting existing places to maximize local transit and drop-off access, while also ensuring that schedules are synchronized between connecting transit routes and accommodating emerging practices that support these access modes. In all cases, transit agencies are a major player with local jurisdictions and WSDOT playing more of a supporting role.

Roles and Responsibilities

Local Jurisdictions. For local jurisdictions to play a lead role in increasing access via local transit and drop-off modes will typically mean addressing issues in places that are already built and thus require some amount of retrofitting to accommodate these access modes. Local jurisdictions also have a role to play in establishing policy and regulatory frameworks for new shared mobility services, and can also influence the design of new transit capital facilities to increase local transit and drop-off modes of access.

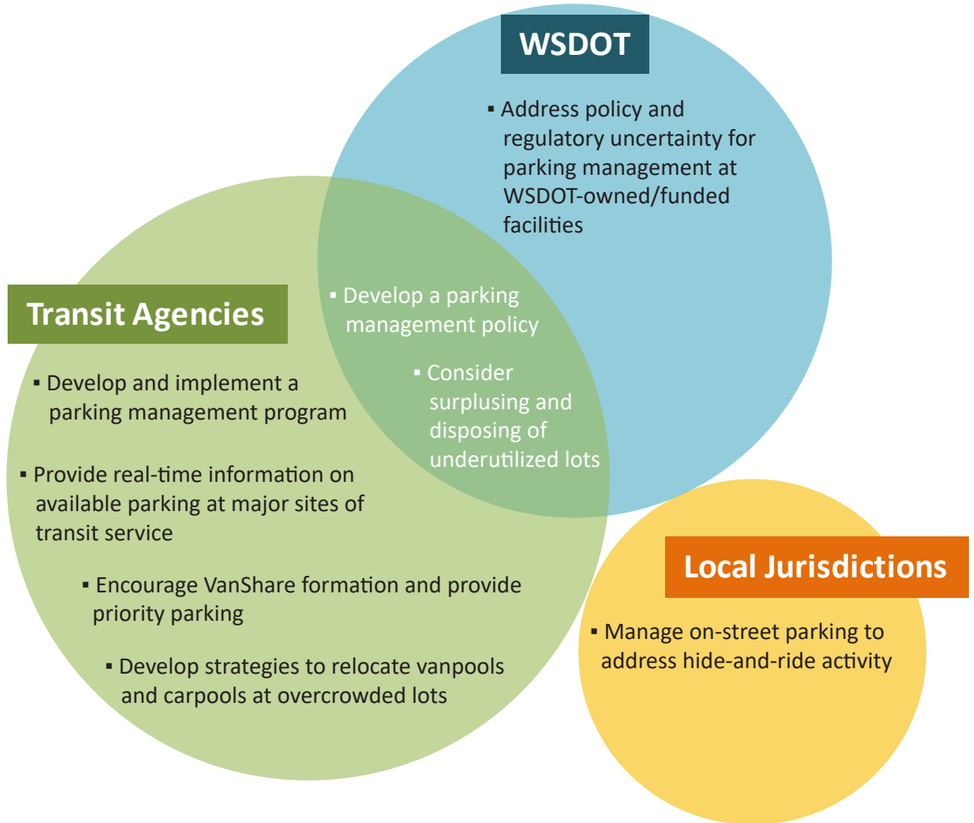
Transit Agencies. Transit agencies—and primarily Sound Transit—will play the lead role in ensuring new transit capital investments can accommodate and maximize local transit and drop-off modes of access, and must do so in close collaboration with local jurisdictions, and, when appropriate, WSDOT. In addition, transit agencies may have a significant role to play in retrofitting existing places and must also be a part of the dialogue in accommodating emerging shared mobility options.

WSDOT. WSDOT's role will be relatively minor when it comes to increasing access via local transit and drop-off modes. Where they will have a sizable influence is in places that they own or have a property interest in and can therefore help determine the scope of improvements that maximize local transit and drop-off access to transit.

IMPROVE ACCESS VIA LOCAL TRANSIT AND DROP-OFF MODES

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
1. Consider and accommodate emerging shared mobility and street use practices that improve access to transit	This is acknowledging that there are new mobility services (e.g. Lyft, car2go, etc.) that can have positive access effects so long as they are being considered and accommodated.	Increased ridership. Improved local transit and vehicle access to transit.	Locals have a clear role in making policy/regulatory changes to accommodate this practice, with transit agencies needing to engage at the site level where appropriate.	May result in adopted policy, which can take several months or longer.	$ Primarily staff time and potentially some consultant support.	Some uncertainty of what best practices are in accommodating shared mobility. Potential equity concerns and implications.	SDOT's Multimodal Hubs pilot effort.
2. Emphasize and prioritize local transit and drop-off access in the design of major transit capital facilities	This ensures that new facilities can adequately accommodate local transit and drop-off modes.	Potential ridership increase. Improved vehicle access to transit.	Major transit capital facilities are typically developed by Sound Transit, but must actively involve all appropriate stakeholders when considering bus and drop-off integration facilities	Would occur in the design phase of a project, which can last several years.	$$$$ The preliminary engineering and design phases of a major transit capital project can be several tens to more than $100M.	Primarily around trade-offs associated with maximizing benefit given limited resources.	Federal Way Link Extension.
3. Retrofit existing facilities to better accommodate local transit and drop-off needs	This seeks to find ways to improve local transit and drop-off access at existing facilities that may not adequately accommodate these access modes.	Increased ridership. Improved local transit and vehicle access to transit.	True partnerships insofar as that these projects typically involve changes to urban form, station areas, and transit service at a particular site. Can be unclear who the lead is in certain circumstances.	Typically these are large-scale projects that take several years.	$$$-$$$$ Can vary depending on scale of the project, but likely to be in excess of $10M.	These projects can be very disruptive and lengthy. Assembling funding can add complexity and introduce uncertainty about when investments will occur.	Accessible Mount Baker in the City of Seattle.
4. Synchronize schedules between routes and modes serving major sites of transit service, particularly local transit to regional transit services	This ensures that riders arriving via connecting transit have minimal wait times when making a two-seat trip, especially if the headways on the second seat are less frequent.	Shorter travel times.	Primarily an exercise between the transit service providers at specific sites working together to synchronize schedules.	Can occur relatively quickly, but must be timed with relevant service changes.	$ Primarily staff time and potentially some consultant support.	Primarily around managing disruptions to schedules that are synchornized in ways that minimize penalities to riders.	Kitsap Transit and WSF have a long history of route and schedule synchronization at ferry terminals in Kitsap County.

MANAGE TRANSIT PARKING DEMAND



Access Improvement	*Local Jurisdictions*	*Transit Agencies*	*WSDOT*
1. Address policy and regulatory uncertainty for parking management at WSDOT-owned/funded facilities		Advise, consult, and participate	Adopt policy
2. Develop a parking management policy	Advise, consult, and participate	Adopt policy	Adopt policy
3. Consider surplusing and disposing of underutilized lots	Advise, consult, and participate	Adopt policy	Adopt policy
4. Develop and implement a parking management program	Advise, consult, and participate	Operate and maintain	Advise, consult, and participate
5. Develop strategies to relocate vanpools and carpools at overcrowded lots	Advise, consult, and participate	Operate and maintain	Advise, consult, and participate
6. Encourage VanShare formation and provide priority parking	Advise, consult, and participate	Operate and maintain	Advise, consult, and participate
7. Provide real-time information on available parking at major sites of transit service	Advise, consult, and participate	Construct, Operate and maintain, Contribute funding	Advise, consult, and participate, Contribute funding
8. Manage on-street parking to address hide-and-ride activity	Adopt policy	Advise, consult, and participate	

Legend

Adopt policy · Identify in planning documents · Advise, consult, and participate · Construct · Operate and maintain · Contribute funding

The Value of this Strategy

Many people in the region access transit by driving and parking at a transit parking facility. In some places, demand is so great for transit parking that spaces are full by 7:00am creating overcrowded lots, congested local streets surrounding these facilities, and crush-loaded trains and buses that bypass riders down the line, filled with riders who commute early not out of convenience or need, but simply to get a parking space.

Managing demand for transit parking can help maximize the efficiency of these important regional assets and mitigate some of the negative impacts associated with excess demand for transit parking.

The Value of Working Together

As the owners of most transit parking facilities, transit agencies and WSDOT must play the primary role in managing demand at the most crowded places. And because most transit parking facilities aren't managed, establishing clarity on what is possible and then developing policy will be crucial.

Transit agencies can pursue other tools to manage demand—including providing real-time information about parking utilization—while local jurisdictions can address on-street hide-and-ride parking behavior in the immediate vicinity of overcrowded transit parking facilities, particularly where local residents and businesses have expressed concerns.

Roles and Responsibilities

Local Jurisdictions. Local jurisdictions play primarily a consultative role when it comes to managing demand at transit parking facilities. Because a shift from free, first-come first-served parking to a managed approach will bring changes to the operation and performance of these places, local jurisdictions should be given an opportunity to weigh in on any proposed changes. In addition, local jurisdictions can make changes to on-street parking to address existing or potential hide-and-ride activity in the immediate vicinity of major sites of transit service.

Transit Agencies. Transit agencies will play the lead role in managing demand at transit parking facilities that they own and operate. And because multiple transit agencies own individual facilities, designing a consistent customer-facing program is advisable. Once a parking management program is in place, transit agencies will be responsible for operating it as well as related strategies to manage demand and capital improvements like real-time information of parking utilization.

WSDOT. WSDOT owns or has a property interest in many transit parking facilities and there currently isn't clarity about what types of parking management can occur at these places. Once this is resolved, WSDOT will primarily play a consultative role and may also contribute funding to small capital improvements.

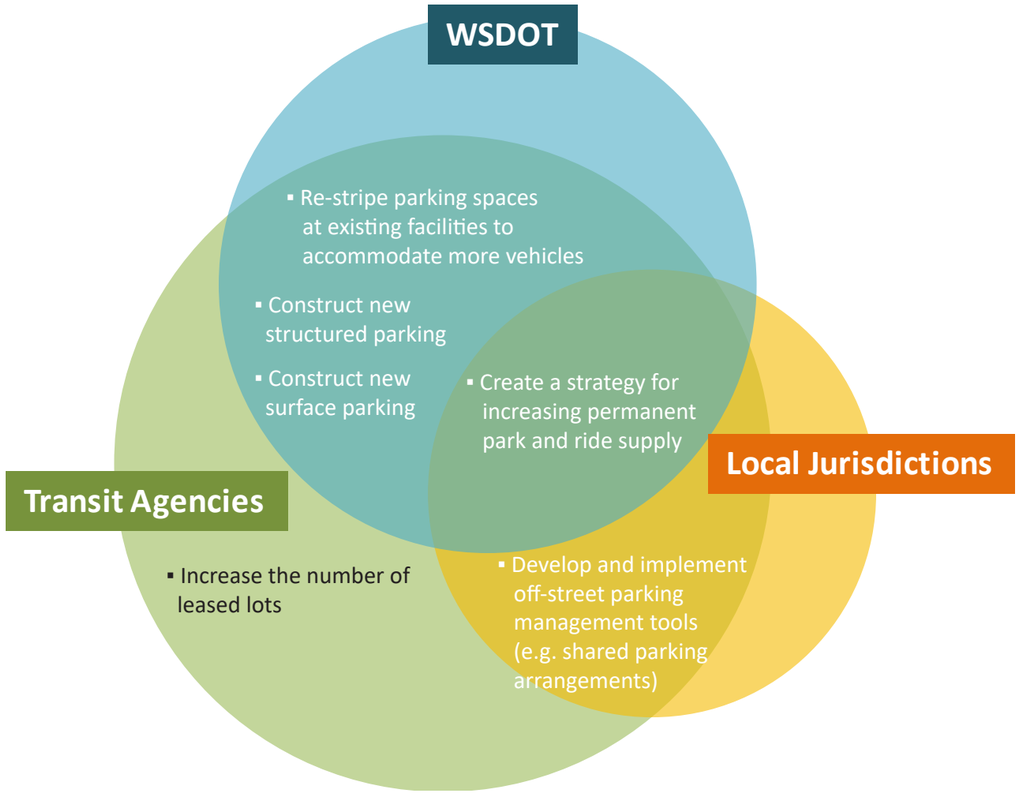
MANAGE TRANSIT PARKING DEMAND

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
1. Address policy and regulatory uncertainty for parking management at WSDOT-owned/funded facilities	Acknowledges that there is a lack of clarity around the extent of parking management possible at WSDOT-owned/funded lots.	Greater certainty for transit parking facility owners and operators.	Primarily WSDOT providing clarity on limitations associated with parking management at its owned/funded facilities.	Imminently.	$ Staff time to come to a determination.	Complexity of funding and very much subject to interpretation. Uncertain path forward once limitations are identified.	There is an effort underway in the region to address policy and regulatory uncertainty at WSDOT-owned facilities.
2. Develop a parking management policy	Establishes an agency's approach to addressing transit parking facilites with excess demand.	Greater efficiency of park and ride supply.	Ultimately a decision of the agency's governing body, but should be developed collaboratively with park and ride users, partner agencies, and local jurisdictions where facilities are located.	Policy development process is likely to take 6-18 months.	$ Primarily staff time and potentially some consultant support.	Ensuring policy alignment with partner agencies may be challenging. Changing from free, unmanaged parking may lead to pushback.	Sound Transit System Access Policy. King County Metro Strategic Plan Updates.
3. Consider surplusing and disposing of underutilized lots	Recognizes that there are park and rides with consistently poor utilization, and it may make sense to sell them.	Potential for adding funding for other access improvements. Reduced costs from no longer operating and maintaining these facilities.	Relevant facility owner would engage in a process to determine if this is the best approach, working with relevant stakeholders as necessary.	Would vary depending on facility circumstances, but the disposition process can take many months to a few years to consummate.	$ Staff time to manage a real estate transaction. Would also return funds to the seller.	Uncertain and difficult process in disposing of places constructed with state and federal funds. May be resistance from some part of the community as well.	There would need to be direction given by the owners of the underutilized facilities to undertake this effort.
4. Develop and implement a parking management program	Establishes an agency's program for actually managing transit parking facilities with excess demand.	Greater efficiency of park and ride supply.	The implementing agency will develop and implement the program and should do so in collaboration with relevant stakeholders.	Program development is likely to take 12-24 months.	$-$$ Staff time to develop a program and start-up costs to implement the program (potentially through a 3rd party vendor). May ultimately generate revenue.	Ensuring program alignment with partner agencies may be challenging. Changing from free, unmanaged parking may lead to pushback.	Sound Transit's Parking Permit Program

MANAGE TRANSIT PARKING DEMAND

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
5. Develop strategies to relocate vanpools and carpools at overcrowded lots	Recognizes that carpool and vanpool groups also use transit parking facilites and may have other options at places with excess demand.	Greater vehicle access for fixed route transit users.	The relevant agency implementing these strategies will develop and implement the program, working with vanpool groups at the facilities in question.	Relatively short to get these strategies up and running.	$ Staff time to develop and implement the program. Potential costs associated with incentives for relocating carpool/vanpool groups.	Potential resistance from carpool/vanpool group members who prefer to choose where they park.	Sound Transit Parking Management Pilots.
6. Encourage VanShare formation and provide priority parking	Provides priority parking to vehicles for two or more fixed route transit users at transit parking facilities with excess demand.	Greater efficiency of park and ride supply.	The relevant agency implementing this strategy will develop and implement the program.	Relatively short to get this strategy up and running.	$ Staff time to develop and implement the program. Potential costs associated with VanShare vehicles and reserved parking signage.	Uncertainty around reserved parking at some facilities in the region. May be a moot strategy if other parking management strategies (e.g. HOV permits) are widespread.	Sound Transit Parking Management Pilots.
7. Provide real-time information on available parking at major sites of transit service	Would allow park and ride users to know in advance if parking is available at their preferred locations.	Greater certainty for park and ride users. Potential benefit of more efficiently spreading demand across the park and ride system through improved information.	Transit parking facility owners would need to collaborate on an approach and cost sharing to implement a consistent system and technology.	Would likely take several years to implement this technology at all the region's transit parking facilities.	$$$$ Given the number of facilities, the need to design a system and procure hardware and software, and ongoing maintenance and operation costs, likely very costly.	Start-up costs both from a resource and political perspective are high. Many different types of facilities add complexity.	Sound Transit Parking Management Pilots.
8. Manage on-street parking to address hide-and-ride activity	Hide and ride refers to the practice of parking on typically unmanaged streets and using proximate transit service.	Principally about allowing street uses in line with a local jurisdiction's preferences.	The local jurisdiction with authority over the streets where hide and ride parking occur would implement appropriate regulations to manage this behavior.	Likely requires several months to initiate and complete a process to change street use in the relevant areas.	$ Primarily staff time to manage the process.	Changes in existing street use may lead to pushback.	Sound Transit has worked with the cities of SeaTac and Tukwila on this and is commited to doing so as part of the East Link project as well.

INCREASE TRANSIT PARKING SUPPLY



Access Improvement	*Local Jurisdictions*	*Transit Agencies*	*WSDOT*
1. Create a strategy for increasing permanent park and ride supply			
2. Develop and implement off-street parking management tools (e.g. shared parking arrangements)			
3. Re-stripe parking spaces at existing facilities to accommodate more vehicles			
4. Increase the number of leased lots			
5. Construct new surface parking			
6. Construct new structured parking			

Legend

Adopt policy · **Identify in planning documents** · **Advise, consult, and participate** · **Construct** · **Operate and maintain** · **Contribute funding**

The Value of this Strategy

Many people in the region access transit by driving and parking at a transit parking facility. In some places, demand is so great for transit parking that spaces are full by 7:00am creating overcrowded lots, congested local streets surrounding these facilities, and crush-loaded trains and buses that bypass riders down the lined, filled with riders who commute early not out of convenience or need, but simply to get a parking space.

Supply-side solutions will be necessary to absorb excess and latent demand for transit parking and can be accomplished in a variety of ways that help increase access to transit.

The Value of Working Together

All entities have a part to play in increasing the region's transit parking supply. Constructing new surface and structured parking is an obvious solution, but these can be very large capital investments requiring strong collaboration and significant resources. As such, the region may benefit from the creation of a strategy for increasing transit parking supply.

There are other, less-capital intensive tools available, which primarily seek to create additional transit parking by leveraging existing public and private parking supply.

Roles and Responsibilities

Local Jurisdictions. Local jurisdictions have more tools at their disposal for increasing transit parking supply than managing transit parking demand. Specifically, they can pursue tools that leverage existing off-street parking as well as take a more active role in the provision of new transit parking either through leveraging existing city assets or contributing funding to the construction of new surface or structured parking.

Transit Agencies. Transit agencies have a range of policy, programmatic, and capital tools available to increase transit parking supply, including developing innovated shared parking arrangements with multi-family properties near major sites of transit service that have available parking capacity; expanding the number of leased lots; re-striping spaces at existing facilities to increase supply; and, finally, constructing new parking. Transit agencies should also work with local jurisdictions, WSDOT, and PSRC to develop a strategy for increasing transit parking capacity.

WSDOT. Traditionally, WSDOT played a lead role in the provision of parking supply in the region, though this role has diminished over the past several years. As owners of existing park and rides and potential right of way where future supply could be built, WSDOT still has an important to play in shaping where and what type of parking should be built.

INCREASE TRANSIT PARKING SUPPLY

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
1. Create a strategy for increasing permanent park and ride supply	Reconizes that a coordinated approach is necessary for adding permanent park and ride capacity to the region's existing supply.	Greater certainty about how much new parking the region needs and where it should go.	Likely a regional conversation involving all existing facility owners and other interested stakeholders.	Likely a several month-long process. Could potentially be addressed in the next Transportation 2040 update, anticipated in spring 2018.	$ Primarily staff time and potentially some consultant support.	Trade-offs inherent in building additional parking given limitations of available resources.	N/A
2. Develop and implement off-street parking management tools (e.g. shared parking arrangements)	Would focus on increasing utilization of existing underutilized off-street parking supply for transit parking.	More efficient use of overall parking supply. Increased vehicle access to transit.	Transit agencies, local jurisdictions, and owners of private, off-street parking supply would to need to collaborate on mutually beneficial approaches.	Given that there isn't widespread use of these tools in the region, there would likely be a lengthy process to pilot approaches before establishing something permanent.	$-$$ Primarily staff time and potentially some consultant support. May require light capital investments in support of chosen approach.	The major risk has to do with uncertainty of approach and whether it "pencils" for respective parties involved.	King County Metro's Park and Ride Pricing in Multifamily Developments Project
3. Re-stripe parking spaces at existing facilities to accommodate more vehicles	Would result in new, permanent transit parking supply.	Increased ridership. Improved vehicle access to transit.	Primary responsibility lies with the facility owner to actually restripe the lot and ensure compliance with the relevant local jurisdiction's regulations.	Overall process is likely to take several months.	$ Restriping costs are relatively low given other parking supply approaches.	Smaller spaces could lead to more improper parking. Could result in less happy facility users.	King County Metro recent examples.
4. Increase the number of leased lots	Would result in additional transit parking supply.	Increased rideship. Improved vehicle access to transit.	Primarily a transit agency responsibility to engage with private parking owners on the terms of a lease.	Overall process is likely to take several months.	$ Leasing lots is a relatively low cost approach given other parking supply approaches.	May not be sufficient additional parking supply near high-quality transit. Some users may have security concerns associated with parking in a private lot.	King County Metro recent examples.

INCREASE TRANSIT PARKING SUPPLY

Access Improvement	*Description*	*Access Benefits*	*Agency Roles*	*Timing*	*Costs & Funding*	*Common Issues & Challenges*	*Regional Examples*
5. Construct new surface parking	Would result in new, permanent transit parking supply.	Increased ridership. Improved vehicle access to transit. Greater potential for future TOD development.	A transit agency would plan, design, and construct parking per local jurisdiction zoning code and attendant public engagement process.	Planning, design, and construction of new surface parking is likely to take at least a year.	$$$ Typically lower cost than structured parking, but still costly. Also requires ongoing maintenance and operation costs.	Opportunity costs. Some resistance to using large amounts of public funds for parking, especially if that parking isn't managed.	North Base Poulsbo.
6. Construct new structured parking	Would result in new, permanent transit parking supply.	Increased ridership. Improved vehicle access to transit.	A transit agency would plan, design, and construct parking per local jurisdiction zoning code and attendant public engagement process.	Planning, design, and construction of new structured parking is a multi-year process.	$$$$ At least $50K per parking stall. Also requires ongoing maintenance and operation costs.	Opportunity costs. Some resistance to using large amounts of public funds for parking, especially if that parking isn't managed.	ST3.